REMARKS

The Final Office Action mailed March 20, 2007 considered claims 36-46. Claims 36-46 were rejected under 35 U.S.C. 102(e) as being anticipated by Avvari et al. (US 7,165,074) hereinafter *Avvari '074*. Claims 36 and 46 were rejected under 35 U.S.C. 102(e) as being anticipated by Avvari et al. (US 6,978,401) hereinafter *Avvari '401*.[1]

By this paper, claim 36 has been amended[2]. Claims 36-46 remain pending in the application.

The invention is generally directed to testing software builds and increasing code coverage (i.e. testing greater percentages of software code) by tracking differences between software builds and testing new or changed portions between software builds. This is accomplished by creating dictionaries for each software build, comparing the dictionaries, and testing new or changed classes. For example, claims 36 recites scanning a first binary software build of a software product to automatically discover classes in the first binary software build, discovering dependencies of the discovered classes, storing a first dictionary data structure including the discovered classes with their corresponding discovered dependencies, comparing the first dictionary data structure with a second dictionary data structure, the second dictionary data structure including classes organized with their dependencies of a second binary software build of the software product by comparing classes and dependencies set forth in the first and second dictionary data structures, providing an indication of differences between the first and second binary software builds. The claims have been amended to recite that providing an

[1] Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

[2] Support for the amendment can be found throughout the specification, but with particularity at least at page 31, line 23-page 32 line 5 and at originally filed claim 18.

indication of differences includes generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds. Claim 46 is a computer program product embodied on a physical computer readable medium with computer executable instructions for performing the method of claim 36.

The art cited in the present Office Action does not teach or suggest what is recited by the claims. In particular, the cited art fails at least to show "generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds" as is now recited. Notably, this functionality can be used for specific targets so as to help developer in debugging code. As will be illustrated below Avvari '074 is directed to storing coverage data showing testing that has been performed on source code and not to code generation and code debugging. Further, while Avvari '401 shows activity directed to reproducing bugs, Avvari '401 does not show "generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds" as is now recited. Rather Avvari '401 only shows fixing bugs in a production Java VM and determining that bugs are caused by external sources.

Avvari '074 is directed to creating coverage data, by executing test cases. Col. 4, lines 49-56. Test cases are executed to test source code. Col. 5, lines 1-2. The coverage data may be stored as a call tree. Col. 7, lines 18-20. When source code is changed, call trees affected by the modification are located. Col. 4, lines 57-61. Testing of the modified source code can be accomplished by testing only test cases affected by the modifications. Col. 7. lines 7-9. A database storing coverage information can be updated by either replacing changed call tree portions or by completely flushing the database and replacing with an updated call tree. Col. 5, lines 10-16. However, the call trees disclosed in Avvari '074 only show coverage data for

testing that has already been performed. As such, when call tress are compared in Avvari '074, the comparison is only performed so that all or a portion of modified call trees can replace existing call trees. Col. 5, lines 10-16. The comparison does not result in "generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds." Avvari '074 is not so much concerned with generating code as with documenting coverage. Thus, Avvari '074 fails to teach what is recited by the claims of the present application.

Avvari '401 is similar to Avvari '074 and does not compensate for the deficiencies of Avvari '074. Avvari '401 is directed to identifying gaps between an application call tree and a test call tree. See Abstract. A compare engine can compare test data structures with application data structures to determine whether any functions or methods defined in an application executable have not been tested. See col. 7, lines 25-33. Similar to Avvari '074, Avvari '401 illustrates the new test cases are created to cover any gaps between the application call tree and the test call tree. Col. 5, lines 23-29. However, Avvari '401 does not show "generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds" as is recited by the claims of the present application. While Avvari '401 does illustrate various bug detection activities (see e.g. 910 in Figure 9, 1212 in Figure 12A, 1222, 1240, and 1252 in 12B), Avvari '401 only discloses that a determination is made that either the bug should be fixed in production Java VM or that the bug is external to the Java VM. See e.g. 1254 and 1256 in Figure 12B. Avvari '401 is silent with regard to "generating a listing of code, from intermediate code, that produced the differences between the first and second binary software builds." As such, Avvari '401 fails to teach what is recited by the claims of the present application.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 21st day of May, 2007.

Respectfully submitted,

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